activating ***polypeptide***
III and its diagnostic and therapeutic
uses)
INDEX TERM: 186555-73-7P 186555-74-8P 186555-75-9P
ROLE: ARG (Analytical reagent use); BPN (Biosynthetic
preparation); PRP (Properties); THU (Therapeutic use);
ANST (Analytical study); BIOL (Biological study); PREP
(Preparation); USES (Uses)
(nucleotide sequence; cloning and cDNA sequence of
human ***endothelial*** - ***monocyte***
activating ***polypeptide***
III and its diagnostic and therapeutic
uses)

=> d 2 3 kwic

L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 1998 ACS
IT 7440-70-2, Calcium, biological studies 9003-99-0, Peroxidase
9035-58-9, Blood-coagulation factor ***III*** 109319-16-6
RL: BPR (Biological process); BIOL (Biological study); PROC
(Process)
(***endothelial*** - ***monocyte*** ***activating***
polypeptide II, its human and murine cDNA sequence, and
its cytokine activity for host response and tumor regression)

L2 ANSWER 3 OF 3 CAPLUS COPYRIGHT 1998 ACS
IT 9035-58-9, Blood-coagulation factor ***III***
RL: FORM (Formation, nonpreparative)
(formation of, by macrophage and vascular endothelium,
tumor-derived ***endothelial*** ***monocyte*** -
activating ***polypeptide*** II induction of)

=> fil medline

=> s l1

51292 ENDOTHELIAL
14648 MONOCYTE
352773 ACTIVAT?
66094 POLYPEP?
L3 10 ENDOTHELIAL MONOCYTE ACTIVAT? POLYPEP?
(ENDOTHELIAL(W)MONOCYTE(W)ACTIVAT?(W)POLYPEP?)

=> s l3(p)III

130085 III
L4 0 L3(P)III

=> s endothelial monocyte activat? polypep? III

51292 ENDOTHELIAL
14648 MONOCYTE
352773 ACTIVAT?
66094 POLYPEP?
130085 III
L5 0 ENDOTHELIAL MONOCYTE ACTIVAT? POLYPEP? III
(ENDOTHELIAL(W)MONOCYTE(W)ACTIVAT?(W)POLYPEP?(W)III)

=> fil scisearch

=> s l5

60620 ENDOTHELIAL
13151 MONOCYTE
368399 ACTIVAT?
50345 POLYPEP?
146017 III
L6 0 ENDOTHELIAL MONOCYTE ACTIVAT? POLYPEP? III
(ENDOTHELIAL(W)MONOCYTE(W)ACTIVAT?(W)POLYPEP?(W)III)

=> fil biosis

=> s l5

67560 ENDOTHELIAL
23774 MONOCYTE
403011 ACTIVAT?
74559 POLYPEP?
134697 III
L7 0 ENDOTHELIAL MONOCYTE ACTIVAT? POLYPEP? III
(ENDOTHELIAL(W)MONOCYTE(W)ACTIVAT?(W)POLYPEP?(W)III)

=> log y

FILE 'USPAT' ENTERED AT 13:33:19 ON 01 MAY 1998

* WELCOME TO THE *
* U.S. PATENT TEXT FILE *

=> s endothelial monocyte activa? polypep?

4773 ENDOTHELIAL
1533 MONOCYTE
366169 ACTIVA?
17596 POLYPEP?
L1 1 ENDOTHELIAL MONOCYTE ACTIVA? POLYPEP?
(ENDOTHELIAL(W)MONOCYTE(W)ACTIVA?(W)POLYPEP?)

=> s l1(p)III

346010 III
L2 0 L1(P)III

=> d l1 kwic

US PAT NO: 5,641,867 [IMAGE AVAILABLE] L1: 1 of 1
TITLE: Antibody which specifically binds to **endothelial**-
monocyte **activating** **polypeptide** II

ABSTRACT:
This invention provides a purified **endothelial** **monocyte**
activating **polypeptide** (EMAP II). It further provides a method of
obtaining purified **endothelial** **monocyte** **activating**
polypeptide (EMAP II), a method of making antibodies to it and a
method of detecting it. This invention also provides an. . . same.
This invention also provides a method of treating a tumor in a subject by
administering an effective dose of **endothelial** **monocyte**
activating **polypeptide** (EMAP II).

SUMMARY:

BSUM(3)

These . . . response in the mouse footpad model. Because of these
properties, this second polypeptide derived from meth A cells is termed
endothelial-**monocyte** **activating** **polypeptide** II (EMAP II).

SUMMARY:

BSUM(4)

A . . . and MPs, including cell migration and tissue factor
expression (8-13). In addition, two distinct polypeptides from meth
A-conditioned medium termed **endothelial**-**monocyte** **activating**
polypeptides I and II were isolated (5,7). EMAP II, a novel
.apprxeq.20 kDa polypeptide which has recently been cloned and is. . .

SUMMARY:

BSUM(7)

This invention provides a purified **endothelial** **monocyte**
activating **polypeptide** II (EMAP II).

SUMMARY:

BSUM(8)

This invention further provides a method of obtaining purified
endothelial **monocyte** **activating** **polypeptide** II (EMAP II).

SUMMARY:

BSUM(9)

This invention provides a method of obtaining antibodies to purified
endothelial **monocyte** **activating** **polypeptide** II (EMAP II).

SUMMARY:

BSUM(10)

This invention provides a method of detecting the presence of purified
endothelial **monocyte** **activating** **polypeptide** II (EMAP II)
in a sample.

SUMMARY:

BSUM(13)

This invention provides a method of treating a tumor in a subject
comprising administering an effective dose of **endothelial**
monocyte **activating** **polypeptide** II (EMAP II).

DETDESC:

DETD(7)

TNF=tumor necrosis factor; vWF=von Willebrand Factor; PCR=polymerase chain reaction; EC=endothelial cell; EMAP=**endothelial**-**monocyte** **activating** **polypeptide**; VPF/VEGF=vascular permeability factor/vascular endothelial growth factor; GAPDH=glyceraldehyde phosphate dehydrogenase; fMLP=formyl-methionyl-leucinyl-phenylalanine; PMN=polymorphonuclear leukocyte; MP or mononuclear=mononuclear phagocyte; IL=interleukin; IL-I=interleukin 1; Meth. . .

DETDESC:

DETD(9)

This invention provides a purified **endothelial** **monocyte** **activating** **polypeptide** II (EMAP II).

DETDESC:

DETD(10)

This invention further provides an **endothelial** **monocyte** **activating** **polypeptide** II (EMAP II) having an apparent molecular weight of about 20,000 Daltons. More particularly, the EMAP II has an apparent. . .

DETDESC:

DETD(11)

In a specific embodiment of this invention the **endothelial** **monocyte** **activating** **polypeptide** (EMAP II) is murine **endothelial** **monocyte** **activating** **polypeptide** (EMAP II).

DETDESC:

DETD(12)

In an embodiment of this invention **endothelial** **monocyte** **activating** **polypeptide** II (EMAP II) comprises the sequence Gly-Lys-Pro-Ile-Asp-Ala-Ser-Arg-Leu-Asp-Leu -Arg-Ile-Gly-Xaa-Ile-Val-Thr-Ala-Lys (SEQ ID NO: 1). In a specific embodiment, Gly-Lys-Pro-Ile-Asp-Ala-Ser-Arg-Leu-Asp -Leu-Arg-Ile-Gly-Xaa-Ile-Val-Thr-Ala-Lys (SEQ ID. . .

DETDESC:

DETD(13)

This invention provides an antibody capable of binding to **endothelial** **monocyte** **activating** **polypeptide** II. This antibody may be a polyclonal antibody. Alternatively, it may be a monoclonal antibody.

DETDESC:

DETD(14)

This invention further provides a method of obtaining purified **endothelial** **monocyte** **activating** **polypeptide** II comprising, a) obtaining conditioned medium containing Meth A cells; b) purifying the medium from Meth A cells; c) applying. . . e) applying the pooled fractions to an FPLC column; and f) eluting with an ascending salt gradient, thereby obtaining purified **endothelial** **monocyte** **activating** **polypeptide** II.

DETDESC:

DETD(15)

This invention also provides a method of obtaining an antibody to purified **endothelial** **monocyte** **activating** **polypeptide** II comprising a) immunizing a rabbit with Gly-Lys-Pro-Ile-Asp-Ala-Ser-Arg-Leu-Asp-Leu-Arg-Ile -Gly-Cys-Ile-Val-Thr-Ala-Lys (SEQ ID NO: 2) coupled to keyhole limpet hemocyanin; and b). . .

DETDESC:

DETD(19)

This . . . II comprising a) contacting cells with the sample; and b) assaying for tissue factor activity, thereby indicating the presence of **endothelial** **monocyte** **activating** **polypeptide** II. In a specific embodiment the cells are endothelial cells. In another specific embodiment the cells are monocytes.

DETDESC:

DETD(21)

This invention provides a method of inducing inflammation in a subject comprising injecting an inflammation-inducing effective amount of **endothelial** **monocyte** **activating** **polypeptide** II into the footpad of the subject. In a specific embodiment the subject is a mouse.

DETDESC:

DETD(22)

This invention also provides a method of inducing tissue factor comprising contacting cells with a tissue factor-inducing effective amount of **endothelial** **monocyte** **activating** **polypeptide** II. In a specific embodiment the cells are endothelial cells. In another specific embodiment the cells are monocytes.

DETDESC:

DETD(57)

This invention further provides a method of treating a tumor in a subject comprising administering an effective dose of **endothelial** **monocyte** **activating** **polypeptide** II (EMAP II).

DETDESC:

DETD(60)

In . . . invention provides a method of treating a methylcholanthrene A--induced fibrosarcoma tumor in a subject comprising administering an effective dose of **endothelial** **monocyte** **activating** **polypeptide** II (EMAP II). In a specific embodiment the subject is a mammal. In a more specific embodiment the subject is. . .

DETDESC:

DETD(61)

In . . . specific embodiment this invention provides a method of treating a tumor in a subject comprising administering an effective dose of **endothelial** **monocyte** **activating** **polypeptide** II (EMAP II) wherein the effective dose is between about two micrograms and about fifty micrograms. In a more specific. . .

DETDESC:

DETD(62)

An embodiment of the method for treating a tumor in a subject further provides that the **endothelial** **monocyte** **activating** **polypeptide** II (EMAP II) is in a pharmaceutically acceptable carrier.

DETDESC:

DETD(68)

This invention further provides the method for treating a tumor in a subject wherein the **endothelial** **monocyte** **activating** **polypeptide** II (EMAP II) comprises:

DETDESC:

DETD(70)

This invention further provides a pharmaceutical composition comprising an effective amount of **endothelial** **monocyte** **activating** **polypeptide** (EMAP II) in a pharmaceutically acceptable carrier. One of ordinary skill in the art will readily known how to select. . .

DETDESC:

DETD(73)

A. **ENDOTHELIAL** **MONOCYTE** **ACTIVATING** **POLYPEPTIDE** II

DETDESC:

DETD(112)

B. PEPTIDE DERIVED FROM THE AMINO TERMINUS OF **ENDOTHELIAL**-
MONOCYTE **ACTIVATING** **POLYPEPTIDE** II

DETDESC:

DETD(175)

A. **Endothelial** **Monocyte** **Activating** **Polypeptide** II

CLAIMS:

CLMS(1)

What is claimed is:

1. An antibody which specifically binds to **endothelial** **monocyte** **activating** **polypeptide** II, wherein the **endothelial** **monocyte** **activating** **polypeptide** II is characterized by:
an apparent molecular weight of about 20 kilodaltons by SDS-PAGE;
the ability to induce tissue factor by. . .

CLAIMS:

CLMS(4)

4. A method of obtaining an antibody which specifically binds to **endothelial** **monocyte** **activating** **polypeptide** II, comprising:
a) immunizing a rabbit with a peptide comprising the amino acid sequence Gly-Lys-Pro-Ile-Asp-Ala-Ser-Arg-Leu-Asp-Leu-Arg-Ile-Gly-Cys -Ile-Val-Thr-Ala-Lys (SEQ ID NO: 2). . .

=> s 530/350/ccls

L3 2386 530/350/CCLS

=> s l1 AND l3

L4 0 L1 AND L3

=> s 435/69.1/ccls

L5 2632 435/69.1/CCLS

=> s l5 and l1

L6 0 L5 AND L1

=> d l1 fro

US PAT NO: 5,641,867 [IMAGE AVAILABLE] L1: 1 of 1
DATE ISSUED: Jun. 24, 1997
TITLE: Antibody which specifically binds to **endothelial**-**monocyte** **activating** **polypeptide** II
INVENTOR: David M. Stern, Great Neck, NY
Matthias Clauss, Bad Nauheim, Federal Republic of Germany
Janet Kao, New York, NY
Mark Kayton, New York, NY
Steven K. Libutti, Fort Lee, NJ
ASSIGNEE: The Trustees of Columbia University in the City of New York, New York, NY (U.S. corp.)
APPL-NO: 08/129,456
DATE FILED: Sep. 29, 1993
INT-CL: [6] C07K 16/24
US-CL-ISSUED: 530/388.23, 389.2
US-CL-CURRENT: 530/388.23, 389.2
SEARCH-FLD: 530/387.7, 387.9, 388.2, 388.23, 388.8, 388.85, 389.7, 389.2; 436/548, 547; 424/185.1, 277.1; 435/240.27
REF-CITED:

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4,980,160 12/1990 Goldberg et al.

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Kao, et al., J. Biol. Chem. (Oct. 5, 1992) 267(28): 20239-20247.
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ART-UNIT: 186
PRIM-EXMR: Paula K. Hutzell
LEGAL-REP: John P. White

ABSTRACT:
This invention provides a purified **endothelial** **monocyte** **activating** **polypeptide** (EMAP II). It further provides a method of obtaining purified **endothelial** **monocyte** **activating** **polypeptide** (EMAP II), a method of making antibodies to it and a method of detecting it. This invention also provides an effector cell activating protein which contains an amino acid sequence homologous to RIGRIVT and a method of detecting same. This invention also provides a method of treating a tumor in a subject by administering an effective dose of **endothelial** **monocyte** **activating** **polypeptide** (EMAP II).

4 Claims, 22 Drawing Figures

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U.S. Patent & Trademark Office LOGOFF AT 13:37:06 ON 01 MAY 1998

CODEN: PIXXD2
PI WO 9509180 A1 950406
DS W: AU, CA, JP, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AI WO 94-US11085 940929
PRAI US 93-129456 930929
DT Patent
LA English

L2 ANSWER 3 OF 3 CAPLUS COPYRIGHT 1998 ACS
AN 1992:549165 CAPLUS
DN 117:149165
TI Endothelial monocyte-activating polypeptide II. A novel tumor-derived polypeptide that activates host-response mechanisms
AU Kao, Janet; Ryan, Jane; Brett, Gerold; Chen, Jingxian; Shen, Hong; Fan, Yan G.; Godman, Gabriel; Familletti, Philip C.; Wang, Feng; et al.
CS Coll. Physicians Surg., Columbia Univ., New York, NY, 10032, USA
SO J. Biol. Chem. (1992), 267(28), 20239-47
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English

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L2 ANSWER 1 OF 3 CAPLUS COPYRIGHT 1998 ACS
ACCESSION NUMBER: 1997:134868 CAPLUS
DOCUMENT NUMBER: 126:140582
TITLE: Cloning and cDNA sequence of human ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III*** and its diagnostic and therapeutic uses
INVENTOR(S): Coleman, Timothy A.; Olsen, Henrik S.; Rosen, Craig A.
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA; Coleman, Timothy A.; Olsen, Henrik S.; Rosen, Craig A.
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2

	NUMBER	DATE
PATENT INFORMATION:	WO 9640719 A1	961219
DESIGNATED STATES:	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG	
APPLICATION INFORMATION:	WO 95-US7328	950607

DOCUMENT TYPE: Patent
LANGUAGE: English
INT. PATENT CLASSIF.:
MAIN: C07H021-04
SECONDARY: C12P021-00; C12P021-08; C12N001-21; C12N005-10; C12N015-09; C12N015-19; C12N015-63; C12N015-70; C12N015-74; C12N015-79; A61K038-19; A61K048-00; G01N033-50; C07K014-52; C07K016-24
CLASSIFICATION: 3-3 (Biochemical Genetics)
Section cross-reference(s): 1, 13, 15

ABSTRACT:
The cDNA sequence and the corresponding deduced amino acid sequence of protein putatively identified as an ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III*** (EMAP ***III***), as a result of amino acid sequence homol. to EMAP II, are provided. The cDNA was discovered in a cDNA library derived from resting T-cells. It contains an open reading frame encoding a protein of 168 amino acid residues, which represents the active domain of EMAP ***III*** derived from a prosequence which has been proteolytically cleaved. The protein exhibits the highest degree of homol. to EMAP II with 60% identity and 75% similarity over a 150 amino acid stretch. Recombinant techniques for expression of the receptor are described, including (1) bacterial expression using the Escherichia coli expression vector pQE-9, (2) expression in COS cells using the pcDNAI/Amp vector, (3) cloning and expression using the baculovirus expression system with the pRG1 vector (a modification of the pVL941 vector) in Sf9 cells, and (4) expression via gene therapy with the pMV-7 vector based on the Moloney murine sarcoma virus backbone. Diagnostic methods for detecting a mutation in the EMAP ***III*** nucleic acid sequence and detecting altered levels of polypeptide for detecting diseases are also disclosed. EMAP ***III*** may be employed to regress neoplasia, such as tumors in cancers.

SUPPL. TERM: ***endothelial*** ***monocyte*** ***activating*** ***polypeptide*** ***III*** human; protein EMAP ***III*** human; sequence EMAP ***III*** cDNA human
INDEX TERM: Proteins (specific proteins and subclasses)
ROLE: ARG (Analytical reagent use); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(EMAP ***III*** (***endothelial*** - ***monocyte*** ***activating*** ***polypeptide***); cloning and cDNA sequence of human ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III*** and its diagnostic and therapeutic uses)
INDEX TERM: Virus vectors
(baculovirus expression system; cloning and cDNA sequence of human ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III*** and its diagnostic and therapeutic uses)
INDEX TERM: Antitumor agents
Diagnosis
Gene therapy
Genetic engineering
Molecular cloning
Plasmid vectors
(cloning and cDNA sequence of human ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III*** and its diagnostic and therapeutic uses)
INDEX TERM: DNA
ROLE: ARG (Analytical reagent use); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cloning and cDNA sequence of human ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III*** and its diagnostic and therapeutic uses)
INDEX TERM: Antibodies
ROLE: ARG (Analytical reagent use); BPN (Biosynthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cloning and cDNA sequence of human ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III*** and its diagnostic and therapeutic uses)
INDEX TERM: Mutation
(detn. of; cloning and cDNA sequence of human ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III*** and its diagnostic and therapeutic uses)
INDEX TERM: Susceptibility (genetic)
(diagnosis; cloning and cDNA sequence of human ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III*** and its diagnostic and therapeutic uses)
INDEX TERM: cDNA sequences
(for human ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III***)
INDEX TERM: Protein sequences
(of human ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III***)
INDEX TERM: Retroviral vectors
(pMV-7; cloning and cDNA sequence of human ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III*** and its diagnostic and therapeutic uses)
INDEX TERM: COS cell
Escherichia coli
SF9 cell
(recombinant expression host; cloning and cDNA sequence of human ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III*** and its diagnostic and therapeutic uses)
INDEX TERM: Diseases (animal)
(therapy of; cloning and cDNA sequence of human ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III*** and its diagnostic and therapeutic uses)
INDEX TERM: 186555-76-0P
ROLE: ARG (Analytical reagent use); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; cloning and cDNA sequence of human ***endothelial*** - ***monocyte***

$

=> s endothelial monocyte activat? polypep?

35680 ENDOTHELIAL
18117 MONOCYTE
671853 ACTIVAT?
91707 POLYPEP?
L1 14 ENDOTHELIAL MONOCYTE ACTIVAT? POLYPEP?
(ENDOTHELIAL(W)MONOCYTE(W)ACTIVAT?(W)POLYPEP?)

=> s l1(p)III

569174 III
L2 3 L1(P)III

=> d 1-3 ab

L2 ANSWER 1 OF 3 CAPLUS COPYRIGHT 1998 ACS
AB The cDNA sequence and the corresponding deduced amino acid sequence of protein putatively identified as an ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III*** (EMAP ***III***), as a result of amino acid sequence homol. to EMAP II, are provided. The cDNA was discovered in a cDNA library derived from resting T-cells. It contains an open reading frame encoding a protein of 168 amino acid residues, which represents the active domain of EMAP ***III*** derived from a prosequence which has been proteolytically cleaved. The protein exhibits the highest degree of homol. to EMAP II with 60% identity and 75% similarity over a 150 amino acid stretch. Recombinant techniques for expression of the receptor are described, including (1) bacterial expression using the Escherichia coli expression vector pQE-9, (2) expression in COS cells using the pcDNAI/Amp vector, (3) cloning and expression using the baculovirus expression system with the pRG1 vector (a modification of the pVL941 vector) in Sf9 cells, and (4) expression via gene therapy with the pMV-7 vector based on the Moloney murine sarcoma virus backbone. Diagnostic methods for detecting a mutation in the EMAP ***III*** nucleic acid sequence and detecting altered levels of polypeptide for detecting diseases are also disclosed. EMAP ***III*** may be employed to regress neoplasia, such as tumors in cancers.

L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 1998 ACS
AB A purified endothelial monocyte activating polypeptide (EMAP II) is provided. Further provided are a method of obtaining purified EMAP II, a method of making antibodies to it, and a method for its detection. This invention also provides an effector cell activating protein which contains an amino acid sequence homologous to RIGRIVT and a method of detecting same. This invention also provides a method of treating a tumor in a subject by administering an ED of EMAP II. Thus, EMAP-II was initially identified in the supernatant of murine methylcholanthrene A-induced fibrosarcomas by its capacity to activate host effector cells. Based on its N-terminal protein sequence, a full-length cDNA was cloned which indicates that the precursor of EMAP II is a unique, leaderless, single polypeptide chain with predicted mol. mass .apprx.34 kDa and that the mature form released by Meth A cells corresponds to .apprx.20 kDa. Purified recombinant mature EMAP II activated endothelial cells with resulting elevation of cytosolic free calcium concn, release of von Willebrand factor, induction of tissue factor, and expression of the adhesion mols. E-selectin and P-selectin. Neutrophils exposed to EMAP II demonstrated elevated cytosolic free calcium concn., peroxidase generation, and chemotaxis. EMAP II also activated mononuclear phagocytes. Systemic infusion of EMAP II into C3H/HeJ or Balb/c mice was assocd. with systemic toxicity, pulmonary congestion, and the appearance of TNF, interleukin-1 and -6 in the plasma. A single intra-tumor injection of EMAP II into Meth A sarcomas induced acute thrombohemorrhage and partial tumor regression. Local injection of EMAP II into a tumor resistant to the effects of TNF, murine mammary carcinoma, rendered it sensitive to subsequently administered TNF, which resulted in acute thrombohemorrhage and partial regression. Thus, recombinant EMAP II, a tumor-derived cytokine, has properties of a proinflammatory mediator with the capacity to prime the tumor vasculature for a locally destructive process.

L2 ANSWER 3 OF 3 CAPLUS COPYRIGHT 1998 ACS
AB An important means by which tumor cells influence the vasculature is through the prodn. of sol. mediators altering vascular properties. A .apprxeq.22-kDa polypeptide was purified to homogeneity from conditioned medium of murine methylcholanthrene A (meth A) fibrosarcoma cells by ion-exchange chromatog. and preparative SDS-PAGE, based on its ability to induce tissue factor procoagulant activity in endothelial cells (ECs). The final product migrated as a broad band on reduced and nonreduced SDS-PAGE and had an unique N-terminal sequence. This meth A-derived polypeptide modulated EC coagulant properties through the induction of tissue factor, induced monocyte migration and tissue factor expression, and was also chemotactic for granulocytes. Injection of the polypeptide into mouse footpads resulted in an inflammatory response with tissue swelling and polymorphonuclear leukocyte infiltration. The ability of this mediator to activate ECs and monocytes suggested the name EMAP II (endothelial monocyte-activating polypeptide). EMAP II is distinct from a previously described .apprxeq.40-kDa meth A-derived polypeptide termed EMAP I. Through its potential to activate host effector mechanisms, EMAP II could contribute to the biol. of immunogenic tumors, such as the meth A fibrosarcoma.

=> d 1-3 \

'\' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS ------- GI and AB
ALL ------- BIB, AB, IND
APPS ------- AI, PRAI
BIB ------- AN, plus Bibliographic Data (default)
CAN ------- List of CA abstract numbers without answer numbers
CBIB ------- AN, plus Compressed Bibliographic Data
DALL ------- ALL, delimited (end of each field identified)
IND ------- Indexing data
IPC ------- International Patent Classifications
MAX ------- Same as ALL
PATS ------- PI, SO
SAM ------- CC, SX, TI, ST, IT
SCAN ------- CC, SX, TI, ST, IT (random display, no answer numbers; SCAN must be entered on the same line as the DISPLAY, e.g., D SCAN or DISPLAY SCAN)
STD ------- BIB, IPC, and NCL

IABS ------- ABS, indented with text labels
IALL ------- ALL, indented with text labels
IBIB ------- BIB, indented with text labels
ISTD ------- STD, indented with text labels

HIT ------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT) containing hit terms
HITRN ------ HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and its structure diagram
FHITSTR ----- First HIT RN, its text modification, its CA index name, and its structure diagram
KWIC ------- Hit term plus 20 words on either side
OCC ------- Number of occurrence of hit term and field in which it occurs

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=> d 1-3

L2 ANSWER 1 OF 3 CAPLUS COPYRIGHT 1998 ACS
AN 1997:134868 CAPLUS
DN 126:140582
TI Cloning and cDNA sequence of human ***endothelial*** - ***monocyte*** ***activating*** ***polypeptide*** ***III*** and its diagnostic and therapeutic uses
IN Coleman, Timothy A.; Olsen, Henrik S.; Rosen, Craig A.
PA Human Genome Sciences, Inc., USA; Coleman, Timothy A.; Olsen, Henrik S.; Rosen, Craig A.
SO PCT Int. Appl., 49 pp.
CODEN: PIXXD2
PI WO 9640719 A1 961219
DS W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
AI WO 95-US7328 950607
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L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 1998 ACS
AN 1995:630126 CAPLUS
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TI Endothelial-monocyte activating polypeptide II, its human and murine cDNA sequence, and its cytokine activity for host response and tumor regression
IN Stern, David M.; Clauss, Matthias; Kao, Janet; Kayton, Mark; Libutti, Steven K.
PA Trustees of Columbia University in the City of New York, USA
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